



National Aeronautics and  
Space Administration

**Jet Propulsion Laboratory**  
California Institute of Technology  
Pasadena, California

# **AIRS Version 5**

## **User Guide and Documentation**

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**AIRS Science Team Meeting, Greenbelt MD**

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# Introduction

- **Document the significant changes between Ver 5 and Ver 4 Releases**
  - *RTA (beyond 4.3  $\mu\text{m}$  NLTE SPIE Paper)*
  - *OLR Fixed*
  - *Quality Flags (L1B, L2, L3) Definition, How Set and How to Use*
  - *Minor Gasses in Standard Product*
  - *New Clear Matchups Product*
  - *Land Skin Temperature*
  - *Cloud Product*
  - *L3 inclusion algorithm*
- **Imperative that we clearly describe these changes in the documentation and guide the user as to how to use them**
  - *Clear description of change (Ver 4 to Ver 5)*
  - *Introductory description of new products and how retrieved*
  - *Instruction as to which quality flags to use and caveats*
  - *Clear warnings as appropriate*
  - *Version 5 Testing Report will be included in documentation package*
  - *Examples (graphics for individual retrievals or granules, as appropriate)*



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# Assignments

- **Retrieval Stage Documentation**

- *L1B Radiances and channel properties (Aumann, Broberg, Gaiser)*
- *Microwave Stage (Rosenkranz, Lee)*
- *Regression Stage (Goldberg, Barnet, Lee)*
- *Physical Retrieval Stage (Susskind, Blaisdell, Lee)*
- *Standard Products, their averaging kernels*
  - Averaging Kernels and Error Estimates (Susskind, Blaisdell, Lee, Fishbein)
  - Temperature and Water Vapor (Hearty, Fetzer, Lee)
  - O3 (Irion)
  - Cloud Product (Fishbein, Hearty, Kahn, Lee)
- *Minor Gasses and their averaging kernels*
  - CO (McMillan, Barnet, Strow)
  - CO2 and CH4 (Barnet, Strow, McMillan)
  - Aerosol and SO2 Flags (De Souza-Machado, Strow, Lee)
- *Level 3 Stage (Granger)*

- **Provide**

- *Clear description of all changes (Ver 4 to Ver 5)*
- *Discussion of new products and how retrieved, including discussion of averaging kernels (graphics are highly desirable in all sections)*
- *Instruction as to which quality flags to use and caveats*
- *Clear warnings as to which retrievals are to be avoided and how*



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## *Timeline*

- **First Drafts Due to ETO**
  - *Friday, October 20, 2006*
- **Feedback from ETO**
  - *Friday, October 27, 2006*
- **Final Drafts Due to ETO**
  - *Friday, November 10, 2006*
- **Submittal to Document Review at JPL**
  - *November 17, 2006*
- **Delivery to GSFC DAAC**
  - *Wednesday, December 6, 2006*
- **V5 Operational at GSFC DAAC**
  - *Monday, December 18, 2006*